

ABSTRACT OF THE DISCLOSURE

The electron emission characteristics and adjustment times of a multi electron source are made approximately equal with simple processes. A

5 characteristics adjustment method for a multi electron source having a plurality of electron emitting devices disposed on a substrate, comprising the steps of measuring electron emission characteristics of each of the electron emitting

10 devices and setting a characteristics adjustment target value, applying a plurality of characteristics shift voltages having discrete values to some of the electron emitting devices, measuring electron emission characteristics of each of the electron

15 emitting devices, and creating a characteristics adjustment table for each of the characteristics shift voltage values in accordance with change rates of the measured electron emission characteristics, selecting a predetermined characteristics shift

20 voltage value from the plurality of characteristics shift voltage values by referring to the characteristics adjustment table created for each of the electron emitting device and applying the predetermined characteristics shift voltage to the

25 electron emitting device to shift the characteristics toward the characteristics adjustment target value, and monitoring a change in the electron emission

characteristics to revise a characteristics shift
condition.